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## NOTICE OF ALLOWANCE AND FEE(S) DUE

22850 7590 03/25/2010

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.

1940 DUKE STREET ALEXANDRIA, VA 22314 EXAMINER CHAN, KAWING

ART UNIT PAPER NUMBER

2837 DATE MAILED: 03/25/2010

 APPELCATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFERMATION NO.

 10/578,182
 05/04/2006
 Toshic Takeuchi
 29/04/07/USJPCT
 4578

TITLE OF INVENTION: METHOD FOR INSPECTING OPERATION OF ACTUATOR AND ACTUATOR OPERATION INSPECTOR

 APPLN TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEES) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 06/25/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includir d below or directed oth ions.	or trans ig the F ierwise	smitting the ISSU atent, advance or in Block 1, by (a						ould be completed where correspondence address as rate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)						Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
OBLON, SPIV 1940 DUKE STE ALEXANDRIA,	7590 03/25 AK, MCCLELLA REET , VA 22314		MAIER & NI			_				
									(Depositor's name)	
									(Signature)	
					L				(Date)	
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		CONFIRMATION NO.		
10/578,182	05/04/2006		Toshie T				290407US3PCT		4578	
TITLE OF INVENTION:										
APPLN, TYPE	SMALL ENTITY	ISS	SUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE	3 FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO		\$1510	\$300		\$0		\$1810	06/25/2010	
EXAM	INER		ART UNIT	CLASS-SUBCLASS	3					
CHAN, K			2837	187-393000						
"Fee Address" indi PTO/SB/47; Rev 03-0; Number is required.  3. ASSIGNEE NAME AT	ondence address (or Cha //122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA ess an assignee is ident n in 37 CFR 3.11. Comp	nge of C ' Indica ed. Use	Correspondence  tion form of a Customer  E PRINTED ON T	or agents OR, alter (2) the name of a segistered attorney 2 registered patent listed, no name will THE PATENT (print of	ip to nativ or a attor II be or typ he pa	3 registered paten ely, e firm (having as a gent) and the name neys or agents. If o printed. e)	memb es of up no nam	er a 2er a 2er a 2er a 2er a 2er a 3er a 4er a 4e	cument has been filed for	
Please check the appropri	ate assignee category or	catego	ries (will not be pr	inted on the patent):		Individual 🚨 Co	rporati	on or other private gro	up entity Government	
4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies				th. Psyment of Fee(s): (Please first reapply any previously paid issue fee shown above)   A check is enclosed.   The Director is hereby suthorized to charge the required fee(s), any deficiency, or credit any overpayment, to Depoid Account Number (enclose an extra copy of this form).						
	SMALL ENTITY state	s. See 3	37 CFR 1.27.					TITY status. Sec 37 CF		
NOTE: The Issue Fee and interest as shown by the r	I Publication Fee (if req ecords of the United Sta	iired) w tes Pate	rill not be accepted int and Trademark	I from anyone other the Office.	han th	ne applicant; a regi	stered a	tttorney or agent; or th	e assignee or other party in	
Authorized Signature						Date				
Typed or printed name				Registration No.						
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.3: U.S.C. USPTO den, sh O NOT S	11. The informatic 122 and 37 CFR O. Time will vary ould be sent to the SEND FEES OR O	n is required to obtain 1.14. This collection is depending upon the Chief Information O COMPLETED FORM	or nois esti indiv office IS TO	etain a benefit by the imated to take 12 r idual case. Any co r, U.S. Patent and THIS ADDRESS	ne publ ninutes mment Traden SENI	ic which is to file (and to complete, including s on the amount of tin ark Office, U.S. Depa D TO: Commissioner f	by the USPTO to process) g gathering, preparing, and the you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,	

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## UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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DATE MAILED: 03/25/2010

APPLICATION NO.	FILING DATE FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/578,182	05/04/2006 Toshie Takeuchi		290407US3PCT	4578		
22850 75	90 03/25/2010		EXAMINER			
OBLON, SPIVA	K, MCCLELLAND	CHAN, KAWING				
1940 DUKE STRE		ART UNIT	PAPER NUMBER			
ALEXANDRIA, V	'A 22314	2837				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 648 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 648 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Notice of Allowability

Application No.	Applicant(s)	
10/578,182	TAKEUCHI ET AL.	
Examiner	Art Unit	
Kawing Chan	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to 02/12/10.
- 2. The allowed claim(s) is/are 1-14.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☑ All b) ☐ Some\* c) ☐ None of the:
    - 1. T Certified copies of the priority documents have been received.
    - Certified copies of the priority documents have been received in Application No.
      - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  $\square$  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) Thereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-946).
- Information Disclosure Statements (PTO/SB/08), Pacer No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- 6 Interview Summery (PTO-413).
  Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other \_\_\_\_

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## DETAILED ACTION

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

Claims 1-14 are pending for examination.

#### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joseph Wrkich on 03/02/10.

The application has been amended as follows:

a. In claim 13:

01/08/10 has been entered.

 Line 7, insert before "wherein the displacing includes," -- wherein the actuator further has an electromagnetic coil for displacing the movable

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portion when a current flows through the electromagnetic coil, where the movable portion is displaced between the semi-operation position and the normal position by adjusting an amount of current to the electromagnetic coil --

- ii. Line 9, replace "an amount of electricity" with -- the amount of current --
- iii. Line 11, replace "an amount of electricity" with -- the amount of current --
- iv. Line 13, replace "an electromagnetic coil" with -- the electromagnetic coil --
- b. In claim 14:
  - v. Line 7, insert before "wherein the displacing includes," -- wherein the actuator further has an electromagnetic coil for displacing the movable portion when a current flows through the electromagnetic coil, where the movable portion is displaced between the semi-operation position and the normal position by adjusting an amount of current to the electromagnetic
  - vi. Line 10, replace "an electromagnetic coil" with -- the electromagnetic coil --
  - vii. Line 13, replace "an amount of electricity" with -- the amount of current --

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iii. Line 14, replace "an amount of electricity" with -- the amount of

current --

ix. Line 16, replace " electricity" with -- current -

## Allowable Subject Matter

### Claims 1-14 are allowed.

The following is an examiner's statement of reasons for allowance: The cited prior art do not teach or suggest a device or method for maintaining the movable portion of an actuator at the semi-operation portion without causing the movable portion to move to the full actuation position. The combinations of the claimed limitations in the independent claims 1 and 3 are not anticipated or made obvious by the prior art of record in the examiner's opinion.

In addition, the examiner's statement of reasons for allowance for claims 11-14 were indicated in the previous Office Action dated 11/09/09.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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#### Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kawing Chan whose telephone number is (571)270-3909. The examiner can normally be reached on Mon-Fri 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. C./ Examiner, Art Unit 2837 /Walter Benson/ Supervisory Patent Examiner, Art Unit 2837